DEFENDANTS' EXHIBIT D

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Defendants may rely on the expert testimony of Dr. James Marks, Professor of Anesthesia and Pharmaceutical Chemistry and Chief of Anesthesia, San Francisco General Hospital, Vice Chairman, Dept. of Anesthesia and Perioperative Care University of California, San Francisco, San Francisco General Hospital, Room 3C-38 1001 Potrero Ave. San Francisco, CA 94110.

Dr. Marks may testify about his education and his background in antibody engineering, including his role in the development of the filamentous phage display technique with Dr. Greg Winter of the Medical Research Council (MRC) in Cambridge, UK. Furthermore, Dr. Marks may explain the technology underlying the patents at issue and the state of the art of various antibody engineering techniques at relevant dates. Specifically, Dr. Marks may explain:

- what TNFα is and what role it plays in the immune system,
- the role of TNFα in rheumatoid arthritis and other inflammatory diseases,
- the structure and function of antibodies and how they are used as therapeutic agents in diseases such as rheumatoid arthritis,
- the definitions of and distinctions between different monoclonal antibody technology nomenclature terms, including murine, chimeric, humanized, and fully human monoclonal antibodies against proteins such as human TNFα ,
- the techniques that have been used to generate the above types of antibodies,
- what the patents-in-suit do and do not disclose about anti- TNFα antibodies,

- the testing disclosed in the patents-in-suit underlying the claim requirement that an antibody "competitively inhibits binding of A2",
- the arguments made in the prosecution history of the patents-in-suit and their significance to one of ordinary skill in the art.

Moreover, depending on the extent to which Plaintiffs rely on expert testimony for claim construction, Defendants reserve the right to rely on the testimony of Dr. Marks as described further below.

1. Dr. Marks may testify that a person skilled in the art would interpret the disputed claim terms consistent with Abbott's proposed constructions as set forth in Exhibit B to the Joint Claim Construction and Prehearing Statement ("Exhibit B") based on what was known in the art at the time in combination with the extrinsic and intrinsic evidence cited in Exhibit B.

2. More specifically:

a. Dr. Marks may testify that based on what was known in the art at the time in combination with the intrinsic evidence set forth in the first row of Exhibit B, the term "recombinant" anti-TNFα antibody as used in asserted claims of the '775 and '239 patents would have been understood to mean an antibody originally developed through artificial *in vitro* DNA manipulation techniques and not substantially by natural immunization techniques.

b. Dr. Marks may testify that based on what was known in the art at the time in combination with the intrinsic evidence set forth in the second row of Exhibit B, the phrase "anti-TNFα antibody" as used in asserted claims of the '775 and

'239 patents would have been understood to mean a murine or chimeric antibody (combining DNA sequences from different species) that binds to human TNFα. Dr. Marks may further testify that no fully human antibody is described in the specifications of the '775 and '239 patents. He may also testify that all uses of "anti-TNFα antibody" in the specifications of those patents refer to either murine or chimeric antibodies. Dr. Marks may also testify that the term "human-human" antibodies in the context of the specifications refers to chimeric antibodies. He may further testify that the original specification of the application to which the '775 and '239 patents claim priority recites the difficulty of isolating fully human antibodies against human proteins and offers chimeric antibodies as a preferred alternative.

c. Dr. Marks may testify that the interpretation of the phrase "competitively inhibits binding of A2 (ATCC Accession No. PTA-7045) to human TNFα" offered by Plaintiffs would not reasonably apprise one of ordinary skill in the art of the scope of the claimed invention. Dr. Marks may also testify that, based on what was known in the art at the time in combination with the intrinsic evidence and extrinsic evidence set forth in the third row of Exhibit B, this phrase would have been understood to mean: (1) that ATCC PTA-7045 is a hybridoma deposited with the American Type Culture Collection and that the product of the ATCC PTA-7045 includes the A2 antibody, which binds to human TNFα; (2) an antibody "competitively inhibits" A2 if, in a standard ELISA or equivalent assay (i) the antibody blocks binding of the antibody product of ATCC PTA-7045 to human TNFα at least as well as the hybridoma product blocks itself AND (ii) the blocking of the ATCC PTA-7045 product is due to the test antibody binding the same epitope of TNFα as the antibody product of ATCC PTA-7045;

and (3) an "epitope" consists of amino acid residues on the antigen to which an antibody binds.

d. Dr. Marks may testify that, based on what was known in the art at the time in combination with the intrinsic evidence set forth in the fourth row of Exhibit B, the phrase "binds to a neutralizing epitope of human TNFα *in vivo* with an affinity of at least $1x10^8$ liter/mole measured as an association constant (K_a), as determined by Scatchard analysis" as used in asserted claims of the '775 patent would have been understood to mean that binding of the anti-TNFα antibody results in a loss of biological activity associated with the human TNFα, and that it binds to the epitope in the organism with an affinity of at least $K_a=1x10^8$ liter/mole as measured in the living organism using Scatchard Analysis.

e. Dr. Marks may testify that, based on what was known in the art at the time in combination with the intrinsic evidence set forth in the fifth row of Exhibit B, the phrase "neutralizing epitope" as used in asserted claims of the '239 patent would have been understood to mean that binding of the anti-TNFα antibody results in a loss of biological activity associated with the human TNFα.

f. Dr. Marks may testify that based on what was known in the art at the time in combination with the intrinsic evidence and extrinsic evidence set forth in the sixth through eighth rows of Exhibit B the term "human variable region", as used in asserted claims of the '775 patent, and the terms "human light chain," and "human heavy chain", as used in certain claims of the '775 patent, would have been understood to have an amino acid sequence predominantly derived from human genetic sequences with

complementarity determining regions (CDRs) grafted from a rodent or other non-human species.

g. Dr. Marks may testify that based on what was known in the art at the time in combination with the intrinsic evidence and extrinsic evidence set forth in the ninth row of Exhibit B, the term "specificity" for a neutralizing epitope of human TNFα as used in an asserted claim of the '775 patent would have been understood to mean that the antibody binds to a neutralizing epitope of human TNFα and chimpanzee TNFα but not to TNFα of other species (e.g., baboon, rhesus monkey, cynomolgous monkey, pig, rabbit, rat, or mouse).

h. Dr. Marks may testify that based on what was known in the art at the time in combination with the intrinsic evidence set forth in the eleventh row of Exhibit B, the phrase "inhibits a pathological activity of TNFα" as used in an asserted claim of the '239 patent would have been understood to mean inhibits a biological activity such as cytotoxicity, inflammation, or other activity associated with human TNFα mediated disease or damage.

i. Dr. Marks may testify that based on what was known in the art at the time in combination with the intrinsic evidence set forth in the twelfth row of Exhibit B the phrase "produced recombinantly" as used in an asserted claim of the '239 patent would have been understood to mean that the recombinant anti-TNFα antibody is a product of DNA that has been artificially introduced into a cell so that it alters the genotype and phenotype of the cell and is replicated along with the natural DNA.

3. In addition, Dr. Marks may offer testimony in response to claim construction arguments presented by Plaintiffs or their expert.